

Title (en)  
AC ELECTRIC MOTOR MONITORING DEVICE AND MONITORING METHOD, AND ELECTRIC MOTOR DRIVE SYSTEM MONITORING DEVICE AND MONITORING METHOD

Title (de)  
WECHSELSTROMELEKTROMOTORÜBERWACHUNGSVORRICHTUNG UND ÜBERWACHUNGSVERFAHREN UND ELEKTROMOTORANSTEUERUNGSSYSTEMÜBERWACHUNGSVORRICHTUNG UND ÜBERWACHUNGSVERFAHREN

Title (fr)  
DISPOSITIF DE CONTRÔLE ET PROCÉDÉ DE CONTRÔLE DE MOTEUR ÉLECTRIQUE À COURANT ALTERNATIF, ET DISPOSITIF DE CONTRÔLE ET PROCÉDÉ DE CONTRÔLE DE SYSTÈME D'ENTRAÎNEMENT DE MOTEUR ÉLECTRIQUE

Publication  
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Application  
**EP 17924438 A 20170905**

Priority  
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Abstract (en)  
[origin: EP3681035A1] The present invention drastically reduces the amount of data by treating current flowing through an AC electric motor as a DC amount. The present invention also performs, in a monitoring device, edge processing for determining an abnormality by converting from AC to DC using a simple algorithm. This AC electric motor monitoring device monitors an AC electric motor driven using a drive power supply, and is characterized by converting a current detection value detected by a current detection means of the AC electric motor to a DC amount and outputting a feature amount on the basis of the DC amount.

IPC 8 full level  
**H02P 29/024** (2016.01); **G01R 31/34** (2020.01); **H02P 23/00** (2016.01)

CPC (source: EP)  
**G01R 31/34** (2013.01); **H02P 23/00** (2013.01); **H02P 29/024** (2013.01)

Citation (search report)

- [X] EP 2372900 A1 20111005 - HONDA MOTOR CO LTD [JP]
- [XYI] AKIN B ET AL: "DSP-Based Sensorless Electric Motor Fault Diagnosis Tools for Electric and Hybrid Electric Vehicle Powertrain Applications", IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 58, no. 5, 1 June 2009 (2009-06-01), pages 2150 - 2159, XP011248742, ISSN: 0018-9545
- [X] AYDIN I ET AL: "A Simple and Efficient Method for Fault Diagnosis Using Time Series Data Mining", ELECTRIC MACHINES&DRIVES CONFERENCE, 2007. IEMDC '07. IEEE INTERNATIONAL, IEEE, PISCATAWAY, NJ, USA, 1 May 2007 (2007-05-01), pages 596 - 600, XP031114903, ISBN: 978-1-4244-0742-2
- [Y] SHNIBHA R A ET AL: "Smart Technique for Induction Motors Diagnosis by Monitoring the Power Factor Using Only the Measured Current", JOURNAL OF PHYSICS: CONFERENCE SERIES, INSTITUTE OF PHYSICS PUBLISHING, BRISTOL, GB, vol. 364, no. 1, 28 May 2012 (2012-05-28), pages 12062, XP020223144, ISSN: 1742-6596, DOI: 10.1088/1742-6596/364/1/012062
- See also references of WO 2019049188A1

Cited by  
WO2022101460A1; CN112486100A; WO2023046572A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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DOCDB simple family (application)  
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